Patent claims

1. CDMA base-station comprising a transmit stage (2, 4, 7, 9, 10, 11, 12) and a re-
ceive stage (3, 5, 8, 13) for communicating with mobile terminals, the transmit

5   stage comprising a power amplifier having at least two independent power mod-
ules (10, 11) for transmitting signals on at least one traffic channel (TCH) and con-
trol and pilot signals on at least one control channel (CCH), each power module
(10, 11) being capable of being operational even though one other power module
is non-operational, the at least two power modules normally being adapted for op-

10   erating simultaneously and each contributing with emitting power, whereby

the CDMA base station moreover comprises a control module (16) monitoring the
error status of the power modules in the base station, the control module carrying
out an error routine, in which the following steps are undertaken,

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when an error signal is detected in a base-station indicative of an error in a power
module (10, 11),

immediately ending operation of all traffic channels associated with the erroneous

20   power module (10, 11), but sustaining operation of the at least one control channel
(CCH).

2. CDMA base station according to claim 1, whereby when the control channel (CCH)
25   has been restored after a fault in a power module has occurred, the base-station

- disables the TPC power loop,

- deletes traffic for a predetermined group of terminals,

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- enables the TPC power loop,

- sets up communication with remaining terminals in sector,

35   - allocates traffic channels (TCH) in sector/ cell to remaining terminals at a new
reduced power level (Prmaxf).

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3. CDMA system according to claim 1, whereby, when a faulty power module (10, 11) in a given cell has been detected, the emission power levels and thereby the capacity of adjacent cells are enhanced.

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4. CDMA base station according to claim 1, comprising a power splitter (9) and a power combiner (12), the power splitter (9) selectively feeding each power module in response to a power splitter control signal (23), each power module (10, 11) having diagnostic lines (19) on which the error states of the power modules are in-

10   dicated.

5. Method for controlling a CDMA base station comprising a transmit stage and a receive stage for communicating with mobile terminals, the transmit stage compris-

15   ing a power amplifier having at least two independent power modules (10, 11) transmitting signals on at least one traffic channel () and control and pilot signals on at least one control channel (CCH), each power module (10, 11) being capable of being operational even though one other power module is non-operational, the at least two power modules normally being adapted for operating simultaneously

20   and each contributing with emitting power, whereby the method comprises the following steps,

- continuously monitoring the fault status of individual power modules in a base station,

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- if a fault in a power module is detected, turning off the faulty power module (10, 11),

- stopping traffic channels (TCH) in sector/ cell associated with faulty power mod-

30   ule (10, 11),

- increase power on control channel (CCH) to nominal level

- disable TPC power loop,

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- delete traffic for predetermined group of terminals,

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- enable TPC power loop,

- set up communication with remaining terminals in sector,

5   - allocate traffic channels (TCH) in sector/ cell to remaining terminals at new re-
            duced power level (Prmaxf).

6.   Method according to claim 5, whereby the base-station under regular operation
10   continuously defines the predetermined group of mobile terminals meant to have
            their communication cancelled.

7.   Method according to claim 6, whereby the predetermined group as a priority com-
15   prises mobiles being in soft handover or softer handover.

8.   Method according to claim 6, whereby, the predetermined group comprises a ran-
            dom selection of mobiles.
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9.   Method according to claim 6, whereby the predetermined group is prioritised by
            those mobiles, which receives or issues most power or bandwidth.